

Claims

1. An electronic mail system for transmitting information from one of a plurality of originating processors to at least one of a plurality of destination processors during operation comprising:

at least one gateway switch, a gateway switch storing information received from one of the at least one originating processor prior to transmission of the information to the at least one destination processor;

a RF information transmission network for transmitting stored information received from one of the at least one gateway switch by RF transmission to at least one destination processor;

at least one interface switch, an interface switch connecting a gateway switch to the RF transmission network and transmitting stored information received from one of the at least one gateway switch to the RF information transmission network; and wherein

the information is transmitted to a receiving interface switch by the electronic mail system in response to an address of the receiving interface switch which has been added to the information originated by the originating processor by either the originating processor or gateway switch and the information is transmitted from the receiving interface switch to the RE information transmission network with an address of the destination processor to receive the information which has been added by either the originating processor, a gateway switch or the receiving interface switch.

2. An electronic mail system in accordance with claim 1 wherein:

the receiving interface switch removes information added by the electronic mail system to the information originated by the originating processor from the stored information received from one of the at least one gateway switch and adds information used by the RF information transmission network during transmission of the information to the information originated by the originating processor to a RF receiver in the RF information transmission network which receives the information and relays it to the destination processor.

3. An electronic mail system in accordance with claim 1 wherein:

the address of the destination processor is an identification number of a RF receiver in the RF information transmission network which receives the information and relays it to the destination processor; and

the receiving interface switch stores information which has been stored by at least one gateway switch that is received from a plurality of originating processors, assembles the information from a plurality of originating processors into a packet and transmits the packet to the RF information transmission network.

4. An electronic mail system in accordance with claim 3 wherein the RF information transmission network comprises:

a switch which receives the packet from the receiving interface switch and disassembles the packet into information from the plurality of originating processors; and wherein

the RF information transmission network transmits the disassembled information, including the identification number of the RF receiver relaying information to a destination processor to a switch in the RF information transmission network storing a file identified by the identification number and any destination of the RF receiver in the RR information transmission network to which the information and identification number is to be transmitted by the RF information transmission network and adds any destination of the RR receiver to the information and the RF information transmission network in response to any added destination transmits the information and identification number to the destination for RF broadcast to the RF receiver for relaying to the destination processor.

5. An electronic mail system in accordance with claim 2 wherein:

the address of the destination processor is an identification number of a RF receiver in the RF transmission network which receives the information and relays it to the destination processor; and

the receiving interface switch stores information which has been stored by at least one gateway switch that is received from a plurality of originating processors, assembles the information from a plurality of originating processors into a packet and transmits the packet to the RF information transmission network.

6. An electronic mail system in accordance with claim 5 wherein the RF information transmission network comprises:

a switch which receives the packet from the receiving interface switch and disassembles the packet into information from the plurality of originating processors; and wherein

the RF information transmission network transmits the disassembled information, including the identification number of the RF receiver relaying information to destination processor to a switch in the RF information transmission network storing a file identified by the identification number and any destination of the RF receiver in the RF information transmission network to which the information and identification number is to be transmitted by the RF information transmission network and adds any destination of the RF receiver to the information and the RF information transmission network in response to any added destination transmits the information and identification number to the destination for RE broadcast to the RF receiver for relaying to the destination processor.

7. An electronic mail system in accordance with claim 1 wherein:

the electronic mail system also transmits information between an originating processor and at least one destination processor through either a public or private switch telephone network without transmission by the RF information transmission network with the destination processor being addressed by a different address during transmission to the destination processor

when using the public switch telephone network transmission network than during transmission by the RF information transmission network.

8. An electronic mail system in accordance with claim 2 wherein:

the electronic mail system also transmits information between an originating processor and at least one destination processor through either a public or private switch telephone network without transmission by the RF information transmission network with the destination processor being addressed by a different address during transmission to the destination processor when using the public switch telephone network transmission network than during transmission by the RF information transmission network.

9. An electronic mail system in accordance with claim 3 wherein:

the electronic mail system also transmits information between an originating processor and at least one destination processor through either a public or private switch telephone network without transmission by the RF information transmission network with the destination processor being addressed by a different address during transmission to the destination processor when using the public switch telephone network transmission network than during transmission by the RF information transmission network.

10. An electronic mail system in accordance with claim 4 wherein:

the electronic mail system also transmits information between an originating processor and at least one destination processor through either a public or private switch telephone network without transmission by the RF information transmission network with the destination processor being addressed by a different address during transmission to the destination processor when using the public switch telephone network transmission network than during transmission by the RF information transmission network.

11. An electronic mail system in accordance with claim 5 wherein:

the electronic mail system also transmits information between an originating processor and at least one destination processor through either a public or private switch telephone network without transmission by the RF information transmission network with the destination processor being addressed by a different address during transmission to the destination processor when using the public switch telephone network transmission network than during transmission by the RF information transmission network.

12. An electronic mail system in accordance with claim 6 wherein:

the electronic mail system also transmits information between an originating processor and at least one destination processor through either a public or private switch telephone network without transmission by the RF information transmission network with the destination processor being

addressed by a different address during transmission to the destination processor when using the public switch telephone network transmission network than during transmission by the RF information transmission network.

13. An electronic mail system in accordance with claim 1 further comprising:

a RF receiver connectable to the destination processor and in response to connection of the RF receiver to the destination processor the RF receiver transfers information stored in a memory of the RF receiver received from the originating processor to the destination processor;

a number of originating processors is greater than a number of interface switches; and

a plurality of originating processors also function as destination processors with a RF receiver connected thereto.

14. An electronic mail system in accordance with claim 1 wherein:

the address of the receiving interface switch is added to the information originated by the originating processor by a gateway switch.

15. An electronic mail system in accordance with claim 1 wherein:

the address of the receiving interface switch is added by the originating processor.

16. An electronic mail system in accordance with claim 1 wherein:

the address of the destination processor is an identification number of a RF receiver receiving the information and relaying the information to the destination processor and is added to the information originated by the originating processor by the originating processor.

17. An electronic mail system in accordance with claim 1 wherein:

the address of the destination processor is an identification number of a RF receiver receiving the information and relaying the information to the destination processor and is added to the information originated by the originating processor by the gateway switch.

18. An electronic mail system in accordance with claim 1 wherein:

the address of the destination processor is an identification number of a RF receiver receiving the information and relaying the information to the destination processor and is added to the information originated by the originating processor by the receiving interface switch.

19. An electronic mail system in accordance with claim 2 wherein:

the address of the receiving interface switch is added to the information originated by the originating processor by a gateway switch.

20. An electronic mail system in accordance with claim 2 wherein:
the address of the receiving interface switch is added by the
originating processor.

21. An electronic mail system in accordance with claim 2 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the originating processor.

22. An electronic mail system in accordance with claim 2 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the gateway switch.

23. An electronic mail system in accordance with claim 2 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the receiving interface
switch.

24. An electronic mail system in accordance with claim 3 wherein:
the address of the receiving interface switch is added to the
information originated by the originating processor by a gateway switch.

25. An electronic mail system in accordance with claim 13 wherein:
the address of the receiving interface switch is added by the
originating processor.

26. An electronic mail system in accordance with claim 13 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the originating processor.

27. An electronic mail system in accordance with claim 13 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the gateway switch.

28. An electronic mail system in accordance with claim 13 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the receiving interface
switch.

29. An electronic mail system in accordance with claim 4 wherein:
the address of the receiving interface switch is added to the
information originated by the originating processor by a gateway switch.

30. An electronic mail system in accordance with claim 4 wherein:
the address of the receiving interface switch is added by the
originating processor.

31. An electronic mail system in accordance with claim 4 wherein:
the identification number of the RF receiver receiving the information
and relaying the information to the destination processor and is added to the
information originated by the originating processor by the originating processor.

32. An electronic mail system in accordance with claim 4 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the gateway switch.

33. An electronic mail system in accordance with claim 4 wherein:-
the identification number of the RF receiver is added to the
information originated by the originating processor by the receiving interface
switch.

34. An electronic mail system in accordance with claim 5 wherein:
the address of the receiving interface switch is added to the
information originated by the originating processor by a gateway switch.

35. An electronic mail system in accordance with claim 5 wherein:
the address of the receiving interface switch is added by the
originating processor.

36. An electronic mail system in accordance with claim 5 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the originating processor.

37. An electronic mail system in accordance with claim 5 wherein:
the identification number of an RF receiver is added to the
information originated by the originating processor by the gateway switch.

38. An electronic mail system in accordance with claim 5 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the receiving interface
switch.

39. An electronic mail system in accordance with claim 6 wherein:
the address of the receiving interface switch is added to the
information originated by the originating processor by a gateway switch.

40. An electronic mail system in accordance with claim 6 wherein:
the-address of the receiving interface switch is added by the
originating processor.

41. An electronic mail system in accordance with claim 6 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the originating processor.

42. An electronic mail system in accordance with claim 6 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the gateway switch.

43. An electronic mail system in accordance with claim 6 wherein:
the identification number of the RF receiver is added to the
information originated by the originating processor by the receiving interface
switch.

44. An electronic mail system in accordance with claim 14 wherein:
the address of the receiving interface switch is added by matching
an identification of the destination processor with a stored identification of a
destination processor and adding an address of an interface switch stored with the
matched identification of the destination processor to the information as the
address of the receiving interface switch.

45. An electronic mail system in accordance with claim 15 wherein:-
the address of the receiving interface switch is added by an inputting of the address of the receiving interface switch along with an identification of the destination processor.

46. An electronic mail system in accordance with claim 15 wherein:
the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

47. An electronic mail system in accordance with claim 16 wherein:
the identification number is added to the information originated by the originating processor by inputting the identification number to the originating processor.

48. An electronic mail system in accordance with claim 16 wherein:
the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

49. An electronic mail system in accordance with claim 17 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

50. An electronic mail system in accordance with claim 18 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

51. An electronic mail system in accordance with claim 19 wherein:

the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

52. An electronic mail system in accordance with claim 20 wherein:
the address of the receiving interface switch is added by an inputting of the address of the receiving interface switch along with an identification of the destination processor.

53. An electronic mail system in accordance with claim 20 wherein:
the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

54. An electronic mail system in accordance with claim 21 wherein:
an identification number is added to the information originated by the originating processor by inputting the identification number to the originating processor.

55. An electronic mail system in accordance with claim 21 wherein:
the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

56. An electronic mail system in accordance with claim 22 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

57. An electronic mail system in accordance with claim 23 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

58. An electronic mail system in accordance with claim 24 wherein:

the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

59. An electronic mail system in accordance with claim 25 wherein:
the address of the receiving interface switch is added by an inputting of the address of the receiving interface switch along with an identification of the destination processor.

60. An electronic mail system in accordance with claim 25 wherein:
the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

61. An electronic mail system in, accordance with claim 26 wherein:
an identification number is added to the information originated by the originating processor by. inputting the identification number to the originating processor.

62. An electronic mail system in accordance with
claim 26 wherein:
the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor. and adding an identification

number stored with the matched identification of the destination processor to the information as the identification number.

63. An electronic mail system in accordance with claim 27 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

64. An electronic mail system in accordance with claim 28 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

65. An electronic mail system in accordance with claim 29 wherein:

the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

66. An electronic mail system in accordance with claim 30 wherein:

the address of the receiving interface switch is added by an inputting of the address of the receiving interface switch along with an identification of the destination processor.

67. An electronic mail system in accordance with claim 30 wherein:

the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

68. An electronic mail system in accordance with claim 31 wherein:

an identification number is added to the information originated by the originating processor by inputting the identification number to the originating processor.

69. An electronic mail system in accordance with claim 31 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

70. An electronic mail system in accordance with claim 32 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

71. An electronic mail system in accordance with claim 33 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

72. An electronic mail system in accordance with claim 34 wherein:

the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

73. An electronic mail system in accordance with claim 35 wherein:
the address of the receiving interface switch is added by an inputting of the address of the receiving interface switch along with an identification of the destination processor.

74. An electronic mail system in accordance with claim 35 wherein:
the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

75. An electronic mail system in accordance with claim 36 wherein:
an identification number is added to the information originated by the originating processor by inputting the identification number to the originating processor.

76. An electronic mail system in accordance with claim 36 wherein:
the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

80. An electronic mail system in accordance with claim 40 wherein:
the address of the receiving interface switch is added by an inputting of the address of the receiving interface switch along with an identification of the destination processor.

81. An electronic mail system in accordance with claim 40 wherein:
the address of the receiving interface switch is added by matching an identification of the destination processor with a stored identification of a destination processor and adding an address of an interface switch stored with the matched identification of the destination processor to the information as the address of the receiving interface switch.

82. An electronic mail system in accordance with claim 41 wherein:
an identification number is added to the information originated by the originating processor by inputting the identification number to the originating processor.

83. An electronic mail system in accordance with claim 41 wherein:
the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

84. An electronic mail system in accordance with claim 42 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.

85. An electronic mail system in accordance with claim 43 wherein:

the identification number is added to the information originated by the originating processor by matching an identification of the destination processor with a stored identification of a destination processor and adding an identification number stored with the matched identification of the destination processor to the information as the identification number.